

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,437	11/16/2000	Lynn Watson	5087-21	5708
20575	7590	06/03/2004		
MARGER JOHNSON & MCCOLLOM PC 1030 SW MORRISON STREET PORTLAND, OR 97205				
			EXAMINER HOGAN, MARY C	
			ART UNIT 2123	PAPER NUMBER

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/715,437

Applicant(s)

WATSON ET AL.

Examiner

Mary C Hogan

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/12/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/16/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined.
2. **Claims 1-20** have been examined and rejected.

Claim Interpretation

3. The claims have been interpreted as follows:
4. **Claims 1-20** refer to an “operating environment simulation system”, “simulated operating environment” and “operating environment simulator”. It is noted that “simulation” is defined as “the process of imitating a real phenomenon with a set of mathematical formulas” and examples given as to things that can be simulated include weather conditions and chemical reactions. It is further noted that “emulation” is defined as “the ability of a program or device to imitate another program or device” and it is “possible for a computer to emulate another type of computer” and given as an example is “programs that enable an Apple Macintosh to emulate a PC”. Further, by Applicants’ Own Admission, herein referred to as AOA, the specification states “The system allows the user to exactly replicate the typical computer environment in which that user operates” (**specification, page 4, lines 21-22**), “The selection and execution of the proper simulator will cause the host computer to appear to be a Windows NT system, even though the original operating system of the host computer is Windows 98” (**specification, page 4, lines 27-29**) and further “The operating environments it may emulate” (**specification, page 2, line 31**). Based on the definition of simulation, emulation and the AOA, it was concluded that the **Claims 1-20** are directed to an operating environment “emulation” system and were examined as such.

Claim Objections

5. **Claims 9 and 14** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. For example, **Claim 9** discloses “an operating environment simulation system”, but dependent **Claim 14** discloses “the method”. Thus, the dependent claim does not further limit the intervening claim.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 1-20** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification and figures only give a general explanation of how the invention works, but fail to give details as to how the invention is actually made.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 1-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. The independent claims, and consequentially, the dependent claims, recite "operating environment simulation system", "simulated operating environment", and "operating environment simulator". The use of the word, "simulator", as described above in **paragraph 4**, is not adequately supported in the specification or claims and therefore, renders the claims vague and indefinite. Further, based on the definition of simulation, emulation and the AOA as discussed in **paragraph 4**, it was concluded that the **Claims 1-20** are directed to an operating environment "emulation" system and were examined as such.

11. **Claim 9** recites "a set of instructions for several different operating systems". In this phrase, "a set" implies "one" set, however "instructions for several different operating systems" implies that there may be several sets of instructions, one for each processor. This renders the claim vague and indefinite.

12. **Claim 10** recites "a set of instructions for several different processors". In this phrase, "a set" implies "one" set, however "instructions for several different processors" implies that there may be several sets of instructions, one for each processor. This renders the claim vague and indefinite.

13. **Claim 19** recites term "selected" in is an ambiguous term, which renders the claim indefinite.

14. **Claim 9 and 14** are rejected under 35 U.S.C. 112, fourth paragraph, for failing to specify a further limitation of the subject matter claimed. **Claim 9** discloses "operating environment simulation system" and **Claim 14** discloses "the method".

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. **Claims 1-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Lew et al (U.S. Patent 6,385,567) herein referred to as **Lew**.

17. As to **Claims 1, 11 and 20**, **Lew** teaches:

- a. a memory operable to store instructions and data (**column 3, lines 48-52 and column 3, lines 1-6**)
- b. a connector operable to connect the memory to a host computer (**column 3, lines 46-48, "logical connections" and column 3, line 59-column 4, line 6**)
- c. at least one set of instructions stored in the memory, operable to simulate an operating environment on the host computer (**column 3, lines 28-32 and lines 65-column 4 line 1**)
- d. executing these instructions (**column 4, lines 27-33**)

18. As to establishing the memory device of the simulation system as an external memory device of the host computer, it is that program modules residing in a first computer may be stored in the remote computer's storage device (**column 3 line 56-column 4, line 1**), establishing that the memory device of the simulation system is an external memory device for the host computer.

19. As to **Claim 2, Lew** teaches a Universal Serial Bus as an input to the host computer (**column 3, line 41**). Therefore, a Universal Serial Bus Cable is used as a connector between the host device and the memory.

20. As to **Claim 3, Lew** teaches that input devices are often connected to the processor of the host computer by a serial port interface (**column 3, lines 36-38**). The serial port interface encompasses the use of an IEEE-1394 cable since it is a serial bus used for data transfer.

21. As to **Claim 4 and 6, Lew** teaches that wireless signals can be used to connect the host computer and the memory (**column 4, lines 4-5**). The use of wireless signals with a network adapter and/or modem encompasses the use of an infrared or a wireless link in accordance with 802.11b.

22. As to **Claim 5, Lew** teaches the connection of the host computer and memory as a LAN or WAN (**column 3 lines 54-65**) networking environment using a modem or "other means for establishing communications over a network". It is well known in the art that Ethernet cables are used for network connections between computers in a LAN or WAN environment.

23. As to **Claim 7, Lew** teaches the host computer is personal computer compatible (**column 2, line 45**).

24. As to **Claim 8, Lew** teaches the host computer is Macintosh compatible (**column 2, line 45**). It is concluded that the statement "other environments are possible" includes the possibility that the host computer can be Macintosh compatible.

25. As to **Claims 9 and 10, Lew** teaches that the modules carry an identification designating it as either an X86 platform or a native platform module, as one of two different types (**column 4, lines 48-54**), therefore indicating that the instructions in the memory comprise a set of instructions for several operating systems (in this example, X86 and native platform embody "several" operating systems and several different processors) and several different processors (in this example, "Alpha" or "PowerPC" in column 4, lines 13-15).

26. As to **Claim 12, Lew** teaches user input designating the set of instructions to be loaded from the memory device (**column 3, lines 32-34**). It is concluded that the user input can choose an application to be run from the remote storage device, designating the set of instructions to be loaded from memory based on the application chosen.

27. As to **Claim 13, Lew** teaches selecting a set of instructions automatically wherein the set of instructions is made by the host computer (**column 4, lines 31-36**). It is concluded that when the host computer determines the operating environment to be simulated, it automatically loads the external modules necessary for execution.

28. As to **Claim 14**, **Lew** teaches the host computer as an accessory device (**column 2, lines 49-54**). From the specification examples of “accessory devices” such as palmtop devices, notebook computers and cellular phones (**page 3, lines 20-23**), it is concluded that “handheld devices”, “microprocessor based programmable consumer electronics” and “minicomputers” embody types of accessory devices.

29. As to **Claim 15**, **Lew** teaches insulating an operating environment simulator from a host computer. **Lew** discussed this process in **Figure 3**, which outlines the steps taken in the simulation of an operating environment on a host computer. When an application is invoked, the process loads the program and assesses the load list to determine a current module to load. This invoking of the application program starts the simulation process outlined in **Figure 3, (column 5, lines 40-46)** indicating that all inputs to the system are routed through the simulator. This simulation process blocks the task managing applications on the host computer since all invoked applications start the process shown in **Figure 3**. Then, it is determined if the module is a module corresponding to the simulated operating environment. If it is determined that the current module is not a module corresponding to the simulated operating environment and it is not a thunk module, the simulation fails to load the module that is not compatible to the simulated operating environment. Further, the failure to load the application at **step 352** and exit from the simulation process at **step 347 (column 6, lines 20-22)** constitutes an environmental shutdown that prevents interactions between applications meant to run on the environment on the host computer from interacting with applications running on in the simulated operating environment.

30. As to **Claim 16**, **Lew** teaches blocking the host task manager further comprising a complete block. **Lew** discussed this process in **Figure 3**, which outlines the steps taken in the simulation of an operating environment on a host computer. When an application is invoked, the process loads the program and assesses the load list to determine a current module to load. This invoking of the application program starts the simulation process outlined in **Figure 3, (column 5, lines 40-46)** indicating that all inputs to the system are routed through the simulator. This simulation process blocks the task managing applications on the host computer since all invoked applications start the process shown in **Figure 3**. Then, it is determined if the module is a module corresponding to the simulated operating environment. If it is determined that the current module is not a module corresponding to the simulated operating environment and it is not a thunk module, the simulation fails to load the module that is not compatible to the simulated operating environment. It is concluded that these events constitute a complete block of host task managing applications since applications targeted for the host operating environment are unable to load.

31. As to **Claim 17**, **Low** teaches blocking host task managing applications further comprising a partial block. The use of “thunk” modules are discussed (**Column 6, lines 24-42**) wherein one module of the pair implements a set of application program interfaces (API’s) for the emulated platform and the second module of the pair implements corresponding API’s for the host platform. Since these thunk modules do not raise compatibility issues, the process proceeds to determine if the module is compatible with the host platform. If it is, the module is loaded, but if it is not, the module fails to load. This describes a situation where a process intended for the host computer is able to run while the simulated environment is active because no compatibility issues arise since the API’s correspond. This process illustrates a situation where some task managing applications on the host system are able to run at the same time that the simulated environment is running, therefore, the task managing applications of the host computer are partially blocked.

32. As to **Claims 18 and 19**, **Low** teaches that a user may enter commands and information in to the host computer through input devices (**column 3, lines 32-34**). Entering of commands by a user will cause “any” or “selected” interactions between the host computer and the simulated operating environment to occur.

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

34. <http://www.pcwebopedia.com/TERM/e/emulation.html> cites a definition for “emulation”.

35. <http://www.pcwebopedia.com/TERM/s/simulation.html> cites a definition for “simulation”.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C. Hogan whose telephone number is 703-305-7838. The examiner can normally be reached on 7:30AM-5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/715,437

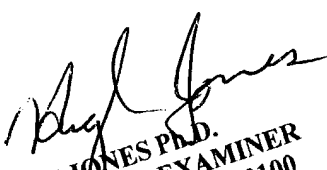
Page 8

Art Unit: 2123

Mary C. Hogan

Assistant Patent Examiner

Art Unit 2123


HUGH JONES P.D.
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100